UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,326	01/29/2004	Lawrence R. Foore	TAN-2-1400.05.US	5495

24374   7590   01/23/2009
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER
QURESHI, AFSAR M

ART UNIT	PAPER NUMBER
2416	

MAIL DATE	DELIVERY MODE
01/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 January 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>35-45</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>35-45</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This Office Action is responsive to RCE and amendment received on 01/06/2009.

Amendments to claim 1 entered as requested.

Response to Arguments

2.   Applicant's arguments filed on 01/06/2009 have been fully considered but they

are not persuasive. Applicant argued about the 'searcher reservation scheme' disclosed

by Quick reference. However, as responded to in the Final Rejection, mailed on

07/09/2008, Searcher reservation scheme clearly indicates an urgency for a mobile to

receive user ID generated based on based on urgency. The scheme is used to obviate

the urgency factor as claimed herein.

        Secondly, Applicant argued that Quick reference fails to teach an added

limitation 'a transceiver configured to receive data traffic from at least one data buffer in

the base station over <u>a data channel and to receive control data indicative of a data rate</u>

<u>associated with the data traffic over a control channel</u>'.

        Upon further search, Examiner found a prior art reference that teaches Channel

structure for communication systems utilizing two sets of physical channels including

data channel and control channel. The control channel is used to carry control data

indicative of a data rate associated with the data traffic. At the time of invention, an

artisan in the pertinent field would have realized the intended invention utilizing the

channel structure as discussed in the following rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 35-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Quick Jr. (US 5,673,259) in view of Rezaiifar et al. (US 6,377,809).

Claims 35-43.   Quick Jr.('Quick') discloses a CDMA cellular telephone system,

used in CDMA applications, having forward link and reverse link, mobile stations 102

(fig. 1) (transceivers) and base stations 108. Mobile station (transceiver) transmits call

request on "Access channels" and is configured to receive data traffic from base

stations on a "Dedicated traffic channel" to carry the VOICE information (see col. 3,

lines 63 through col. 4, lines 1-7). Quick further discloses a searcher reservation

scheme which uses a priority (**urgent factor**) assignment algorithm based on type (user

specific long code used to encode data and voice transmission) and *amount of traffic in*

the queues (buffer) (claim 35), to be transmitted to the CDMA user device, wherein

device receiving data traffic on at least one "Dedicated channel" (see col. 9, lines 50

through col. 10, lines 1-4).

Quick discloses Searcher Scheme, wherein a base station enters a Ready state,

indicating *Urgency* for a mobile to receive User ID. Based on urgency, a User ID is

generated and transmitted from base station, on an assigned channel to the waiting

mobile station in accordance with its assigned relative priority (claims 36-39) (see col. 23, lines 4-23, figure 13B).

The system of Quick also comprises a base station for receiving (and storing) the data packet on the random access channel from the reverse link and for sending the digital information over the forward link. The digital transceivers share the random access channel. The system also includes a dedicated channel for communicating the data packet between the communicating transceiver and the base station and a processor for switching from the random access channel to the dedicated channel, wherein reverse channel carrying the data packets and forward channels carrying digital information (claims 40-43) (see Abstract, figs. 2, element 204, 208, 214, and 12 A).

Quick, however, does not explicitly discuss 'receiving control data indicative of a data rate associated with the data traffic over a *control channel'*.

Rezaiifar et al. ('Rezaiifar' hereinafter) disclose channel structure utilizing physical channels include data channels and control channels. Control channels carrying control data indicative of data rate associated with the data traffic (see col. 8, lines 57-64, col. 9, lines 33 through col. 10, lines 1-5).

It would have been obvious to one of ordinary skill in the art, at the time of invention, to be able to utilize the searcher scheme of Quick since it provides an efficient use of available transmission resources wherein the communication over wireless 'dedicated channel' is prioritized based on type of data (voice/real time), amount of traffic (urgency factor) and need, via searcher reservation scheme used by Quick (see col. 8, lines 52 through col. 9, lines 1-28, also figure 13B).

Furthermore, it would have been obvious to one of ordinary skill in the art, at the

time of invention, to be able to modify Quick utilizing channel structure system taught by

Rezaiifar where control data having information regarding data rate of data traffic can be

carried over a separate control channel thereby providing efficient use of bandwidth.

Claims 44 - 45.   Quick discloses bandwidth demand associated with thresholds

as traffic type attribute. Quick does not specifically disclose if the data buffer is

hardware controlled by fast cache memory (claim 41). However, Quick discloses a

processor 302 (fig. 3), and while in switching signals, is capable of storing data packets

corresponding to threshold levels and based on bandwidth demand, these data packets

are transmitted and controlled by searcher scheme (software) (see col. 11, lines 5-53).

It is known and old that a computer, processor 302 in this case, has fast cache memory

capable of storing instructions, when executed, used to control transmission from

buffers. Therefore it would have been obvious to one of ordinary skill in the art, at the

time of invention, to be able to modify processor 302, utilizing fast cache memory to

control data buffer in order to facilitate an efficient data packet transmission to a cell site

in a CDMA system.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AFSAR M. QURESHI whose telephone number is

(571)272-3178. The If attempts to reach the examiner by telephone are unsuccessful,

the examiner's supervisor, William Trost can be reached on (571) 272 7872. The fax

phone number for the organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Afsar M Qureshi/
Primary Examiner
Art Unit 2416

1/15/2009